

SDMS # 31350

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
Region 9

In The Matter Of:

Phoenix-Goodyear Airport Site
Unidynamics-Phoenix, Inc.,

Respondent.

U.S. EPA
Docket No. 90-20

Proceeding Under Section 106(a) of
the Comprehensive Environmental
Response, Compensation, and
Liability Act of 1980, as amended
(42 U.S.C. section 9606(a))

AMENDED ADMINISTRATIVE ORDER
FOR REMEDIAL DESIGN AND REMEDIAL ACTION

I. INTRODUCTION AND JURISDICTION

This Order directs Respondent, Unidynamics-Phoenix, Inc. (UPI) to perform, for the northern portion of the Phoenix-Goodyear Airport Site, a remedial design for the remedy described in the Record of Decision for the Phoenix-Goodyear Airport Site, dated September 26, 1989, and to implement that design through remedial action. This Order is issued to Respondent by the United States Environmental Protection Agency ("EPA") under the authority vested in the President of the United States by Sections 104(e) and 106(a) of the Comprehensive Environmental Response, Compensation, and Liability Act of 1980, as amended ("CERCLA"), 42 U.S.C. Sections 9604(e) and 9606(a). This authority was delegated to the Administrator of EPA on January

23, 1987, by Executive Order 12580 (52 Fed. Reg. 2926, January 29, 1987), redelegated to EPA Regional Administrators on September 13, 1987 by EPA Delegation No. 14-14-B, and was further delegated to the Director, Hazardous Waste Management Division, EPA Region 9 by Order R1290.43, dated October 26, 1988.

II. FINDINGS OF FACT

1. The Phoenix-Goodyear Airport Site (PGA) encompasses approximately 35 square miles located in the Western part of the Salt River Valley in Goodyear, Arizona. PGA is divided by Yuma Road into a northern and a southern portion. The southern portion of PGA is not owned or operated by UPI and is not addressed by this Order, unless the southern portion exceeds Performance Standards because of Respondent's disposal of hazardous substances.

2. The northern portion of PGA (included in the definition of, and hereinafter referred to as, the "Site") contains a facility owned and operated by the Respondent, Unidynamics-Phoenix Incorporated. Respondent has owned and operated the facility since 1963. From 1963 until 1974, hazardous substances, including some or all of those described in this section, were disposed of at the Site by the Respondent.

3. On September 8, 1983, pursuant to section 105 of CERCLA, 42 U.S.C. Section 9605, EPA placed the Site on the National Priorities List, set forth at 40 C.F.R. Part 300, Appendix B (48 Fed. Reg. 40658).

1 4. From approximately January 1984 to approximately January
2 1989, Respondent undertook a Remedial Investigation and
3 Feasibility Study ("RI/FS") for the Site, pursuant to CERCLA and
4 the National Contingency Plan, 40 C.F.R. Part 300.

5 5. Pursuant to section 117 of CERCLA, 42 U.S.C. Section
6 9617, on June 7, 1989, EPA published notice of the completion of
7 the Feasibility Study and of the availability of the proposed
8 plan for the final remedial action, and provided opportunity for
9 public comment on the proposed final remedial action.

10 6. The decision by EPA on the final remedial action to be
11 implemented at the Site is embodied in a final Record of Decision
12 ("ROD"), executed on September 26, 1989. The State of Arizona has
13 reviewed the ROD and has concurred with EPA's decisions therein.
14 The Record of Decision is attached to this Order as Attachment 1
15 and is incorporated by reference. The Record of Decision is sup-
16 ported by an administrative record that contains the documents
17 and information upon which EPA based the selection of the
18 response action.

19 7. Based on the September 26, 1989 ROD, the final remedy
20 selected for the Site consists of extraction and treatment of the
21 Subunits A and B/C groundwater, and soil-vapor extraction (SVE)
22 for the vadose zone. A complete description of the final remedy
23 for this Site is contained in the September 26, 1989 ROD and in
24 this Order.

1 8. The soil portion (also called the vadose zone) of the
2 final remedy requires removal of volatile organic compounds
3 (VOCs) in accordance with the SVE Operation Flow Chart until EPA
4 determines that the levels remaining in the soil will not cause
5 or contribute to the contamination of Subunit A groundwater in
6 VOC levels in excess of the cleanup levels identified in Table
7 2-5 of the ROD. The SVE Operation Flow Chart is attached to this
8 Order as Attachment 2 and is incorporated by reference. For both
9 groundwater Subunits A and B/C of the Site, EPA established
10 cleanup levels as set forth in Table 2-5 of the 1989 ROD. The
11 Groundwater Remedy requires that cleanup levels are to be met
12 throughout subunits A, B, and C of the aquifer.

13 9. Hazardous substances found at the Site include, but are
14 not limited to trichloroethylene (TCE), 1,1,1-trichloroethane
15 (1,1,1-TCA), acetone, and methyl ethyl ketone (MEK). TCE has
16 been designated by EPA as a probable human carcinogen. The haz-
17 ardous substances are co-mingled in the soils and the groundwater
18 at the Site. Acetone has been detected in the vadose zone, but
19 not in the groundwater.

20 10. The major waste streams generated at the Respondent's
21 facility are waste solvents and explosive production wastes. A
22 review of historical waste handling practices at the Respondent's
23 facility indicated that TCE, 1,1,1-TCA, freon, acetone, MEK, and
24 various alcohols were the principal solvents used. These sol-
25 vents were disposed of directly into dry wells on the Site by the
26 Respondent. The source verification investigations performed
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1 during the Remedial Investigation indicated that elevated levels
2 of various volatile organic compounds, especially TCE, existed in
3 subsurface soils at the Respondent's facility and in groundwater
4 beneath and downgradient of the Respondent's facility. Soil con-
5 centrations of TCE ranged as high as 860 milligrams per kilogram
6 ("mg/kg"). Concentrations of MEK and acetone were detected as
7 high as 659 mg/kg and 888 mg/kg, respectively, in the soil. TCE
8 was found in groundwater samples from monitoring wells at the
9 Site. TCE groundwater concentrations ranged as high as 350,000
10 micrograms per liter (ppb). MEK groundwater concentrations have
11 ranged as high as 11,000 ppb.

12 11. The current land uses consist of agricultural, in-
13 dustrial, and residential uses. Use of the groundwater and
14 development of the surrounding areas may result in potential ex-
15 posures. Future population growth in the area could result in
16 usage of groundwater resources, particularly in the contaminated
17 areas. If no action is taken at this Site, contamination will
18 continue to migrate to areas that contribute to municipal
19 groundwater supply and may threaten public health.

20

21 III. CONCLUSIONS OF LAW AND DETERMINATIONS

22 1. The Site is a "facility" as defined in Section 101(9)
23 of CERCLA, 42 U.S.C. Section 9601(9).

24 2. Respondent is a "person" as defined in Section 101(21)
25 of CERCLA, 42 U.S.C. Section 9601(21).

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1 3. Respondent is a "liable party" as defined in Section
2 107(a) of CERCLA, 42 U.S.C. Section 9607(a), and is subject to
3 this Order under Section 106(a) of CERCLA, 42 U.S.C. Section
4 9606(a).

5 4. The substances listed in Section II.9. of this Order
6 are found at the Site and are "hazardous substances" as defined
7 in Section 101(14) of CERCLA, 42 U.S.C. Section 9601(14).

8 5. These hazardous substances have been released at the
9 Site and are continuing to be released from the soil into the
10 groundwater.

11 6. The past disposal and migration of previously disposed
12 hazardous substances from the Site constitutes a "release" and a
13 continuing threat of a "release" as defined in section 101(22) of
14 CERCLA, 42 U.S.C. section 9601(22).

15 7. The release or threat of release of one or more hazard-
16 ous substances from the facility may present an imminent and sub-
17 stantial endangerment to the public health, welfare, and the en-
18 vironment.

19 8. The actions required by this Order are necessary to
20 protect the public health, welfare, and the environment.

21 IV. NOTICE TO THE STATE

22 Prior to issuing this Order, EPA notified the State of
23 Arizona Department of Water Resources and Department of Environ-
24 mental Quality of its intent to issue this Order.

1 V. ORDER

2 Based on the foregoing, Respondent is hereby ordered to
3 comply with the following provisions, including but not limited
4 to all attachments to this Order, all documents incorporated by
5 reference into this Order, and all schedules and deadlines in
6 this Order, attached to this Order, or incorporated by reference
7 into this Order.

8
9 VI. DEFINITIONS

10 1. Unless otherwise expressly provided herein, terms used
11 in this Order which are defined in CERCLA or in regulations
12 promulgated under CERCLA shall have the meaning assigned to them
13 in the statute or its implementing regulations. Whenever terms
14 listed below are used in this Order or in the documents attached
15 to this Order or incorporated by reference into this Order, the
16 following definitions shall apply:

17 2. "CERCLA" shall mean the Comprehensive Environmental
18 Response, Compensation, and Liability Act of 1980, as amended, 42
19 U.S.C. Sections 9601, et seq.

20 3. "Day" shall mean a calendar day unless expressly
21 stated to be a working day. "Working day" shall mean a day other
22 than a Saturday, Sunday, or Federal holiday. In computing any
23 period of time defined in "days" under this Order, where the last
24 day would fall on a Saturday, Sunday, or Federal holiday, the
25 period shall run until the end of the next working day.

1 4. "Deliverable" shall mean any plan, report, document,
2 or any other item required of the Respondent under this Order.

3 5. "EPA" shall mean the United States Environmental
4 Protection Agency.

5 6. "Groundwater Remedy" shall mean the groundwater ex-
6 traction, treatment, monitoring, and end-use facilities used for
7 the remedy of both subunit A and subunit B/C groundwater so as to
8 achieve Performance Standards throughout the aquifer.

9 7. "National Contingency Plan" or "NCP" shall mean the
10 National Oil and Hazardous Substances Pollution Contingency Plan
11 promulgated pursuant to Section 105 of CERCLA, 42 U.S.C. 9605,
12 codified at 40 C.F.R. Part 300, including any amendments thereto.

13 8. "Operation and Maintenance" or "O&M" shall mean all
14 activities required under the Operation and Maintenance Plans
15 developed by Respondent pursuant to this Order as approved by
16 EPA.

17 9. "Paragraph" shall mean a portion of this Order iden-
18 tified by an arabic numeral.

19 10. "Performance Standards" shall mean those cleanup
20 standards, standards of control, and other substantive require-
21 ments, criteria or limitations, identified in the Record of Deci-
22 sion, particularly those standards identified in Table 2-5 of the
23 ROD, and in Section X and Attachment 2 of this Order, that the
24 Work required by this Order must attain and maintain.

1 11. "Phoenix-Goodyear Airport Superfund Site" shall mean
2 the PGA Study Area Boundary as identified in Figure 1-1 of the
3 ROD and any other areas described in Section 300.400(e) of the
4 NCP.

5 12. "Record of Decision" or "ROD" shall mean the final
6 EPA Record of Decision, Phoenix-Goodyear Airport Superfund Site,
7 Goodyear, Arizona, signed on September 26, 1989, by the Regional
8 Administrator, EPA Region 9, and all attachments thereto.

9 13. "Remedial Action" or "RA" shall mean those ac-
10 tivities, including Operation and Maintenance, to be undertaken
11 by Respondent to implement the final plans and specifications
12 submitted by Respondent pursuant to the Remedial Design Work
13 Plans approved by EPA and required by Section X of this Order,
14 including any additional activities required under Sections XI,
15 XII, XIII, XIV and XV of this Order.

16 14. "Remedial Design" or "RD" shall mean those activities
17 to be undertaken by Respondent to develop the plans and
18 specifications for the Remedial Action pursuant to the Remedial
19 Design Work Plans required by Section X of this Order.

20 15. "Response Costs" shall mean all costs, including
21 direct costs, indirect costs, and accrued interest incurred by
22 the United States to perform or support response actions at the
23 Site. Response costs include, but are not limited to, the costs
24 of overseeing the Work, such as the costs of reviewing or
25 developing plans, reports and other items pursuant to this Order
26 and costs associated with verifying the Work.

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1 16. "Section" shall mean a portion of this Order iden-
2 tified by a roman numeral and including one or more paragraphs.

3 17. "Site" shall mean that area north of Yuma Road within
4 the Phoenix-Goodyear Airport Superfund site, all areas exceeding
5 Performance Standards attributable to Respondent's disposal of
6 hazardous substances, and any other areas described in Section
7 300.400(e) of the NCP.

8 18. "Soil Remedy" also known as "SVE Remedy" shall mean
9 the soil vapor extraction (SVE) facilities used in accordance
10 with Attachment 2 for the remedy of the vadose zone at target
11 areas B and C (subareas I,II,III, and IV) as defined by Figure
12 5-7 of the ROD.

13 19. "State" shall mean the Arizona Department of En-
14 vironmental Quality and the Arizona Department of Water Resources
15 acting on behalf of the State of Arizona.

16 20. "Work" shall mean all activities Respondent is re-
17 quired to perform under this Order, including but not limited to,
18 Remedial Design, Remedial Action, and any activities required to
19 be undertaken pursuant to Sections IX through XVI of this Order.

20 VII. NOTICE OF INTENT TO COMPLY

21 Respondent shall each provide, not later than seven (7) days
22 after the effective date of this Order, written notice to the EPA
23 Remedial Project Manager (RPM) stating Respondent's intent to
24 comply with the terms of this Order. If EPA determines that
25 Respondent does not unequivocally commit to perform the Work as
26 provided by this Order, it shall be deemed to have violated this
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1 Order and to have failed or refused to comply with this Order.
2 Respondent's written notice shall describe, using facts that ex-
3 ist on or prior to the effective date of this Order, any
4 "sufficient cause" defenses asserted by Respondent under sections
5 106(b) and 107(c)(3) of CERCLA. The absence of a response by EPA
6 to the notice required by this Section shall not be deemed to be
7 acceptance of Respondent's assertions.

8 VIII. PARTIES BOUND

9 1. This Order shall apply to and be binding upon the
10 Respondent, its directors, officers, employees, agents, succes-
11 sors, and assigns. No change in the ownership, corporate status,
12 or other control of Respondent shall alter any of the
13 Respondent's responsibilities under this Order.

14 2. Respondent shall provide a copy of this Order to any
15 prospective owners or successors before a controlling interest in
16 Respondent's assets, property rights, or stock are transferred to
17 the prospective owner or successor. To ensure compliance with
18 this Order, Respondent shall provide a copy of this Order to each
19 contractor, sub-contractor, laboratory, or consultant retained to
20 perform any Work under this Order, within five days after the ef-
21 fective date of this Order or on the date such services are
22 retained, whichever date occurs later. Respondent shall also
23 provide a copy of this Order to each person representing Respon-
24 dent with respect to the Site or the Work and shall condition all
25 contracts and subcontracts entered into hereunder upon perfor-
26 mance of the Work in conformity with the terms of this Order.

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1 With regard to the activities undertaken pursuant to this Order,
2 each contractor and subcontractor shall be deemed to be related
3 by contract to the Respondent within the meaning of section
4 107(b)(3) of CERCLA, 42 U.S.C. Section 9607(b)(3). Notwithstand-
5 ing the terms of any contract, Respondent is responsible for com-
6 pliance with this Order and for ensuring that its contractors,
7 subcontractors and agents comply with and perform any Work in ac-
8 cordance with this Order.

9 IX. NOTICE OF OBLIGATIONS TO SUCCESSORS-IN-TITLE

10 1. Within ten (10) days after the effective date of this
11 Order, Respondent shall (1) record a copy or copies of this Order
12 in the appropriate governmental office where land ownership and
13 transfer records are filed or recorded; (2) record a notice of
14 obligation to provide access and related covenants; and (3) en-
15 sure that the recording of this Order is indexed to the titles of
16 each and every property at the Site so as to provide notice to
17 third parties of the issuance and terms of this Order with
18 respect to those properties. Respondent shall, within fifteen
19 (15) days after the effective date of this Order, send notice of
20 full compliance with this Paragraph to EPA.

21 2. Not later than fifteen (15) days prior to any transfer
22 of any real property interest in any property included within the
23 Site, Respondent shall submit a true and correct copy of the
24 transfer documents to EPA, and shall identify the transferee by
25 name, principal business address and effective date of the trans-
26 fer.

X. WORK TO BE PERFORMED

1. Respondent shall cooperate with EPA in providing information to the public regarding the Work. As requested by EPA, Respondent shall participate in the preparation of information for distribution to the public and in public meetings which may be held or sponsored by EPA to explain activities at or relating to the Site.

2. All aspects of the Work shall be performed by qualified employees or contractors of Respondent. Within forty-five (45) days after the effective date of this Order, Respondent shall select the contractor(s) which Respondent proposes to use in carrying out the Work under this Order and notify EPA in writing of the name and qualifications of the contractor(s), including primary support entities and staff. Respondent's selected contractor(s) shall have expertise in: (a) design and implementation of remedial actions involving pump and treat systems for the removal of volatile organic compounds (VOCs) in the groundwater; and, (b) design and implementation of remedial actions involving soil vapor extraction systems.

3. EPA will review and approve/disapprove of Respondent's selected contractor(s) according to the terms of Section X.2. and Section XV.1. and XV.5. of this Order. If EPA disapproves of the selection of a contractor, Respondent shall submit to EPA within 30 days after notice of EPA's disapproval, a list of contractors, including primary support entities and staff, that would be acceptable to Respondent. EPA will thereafter provide written

1 notice to Respondent of the names of the contractors that are ac-
2 ceptable to EPA. Respondent may then select any approved contrac-
3 tor from that list and shall notify EPA of the name of the con-
4 tractor selected within fifteen (15) days of EPA's designation of
5 approved contractors.

6 4. If at any time Respondent proposes to use a different
7 contractor, Respondent shall notify EPA and shall obtain approval
8 from EPA before the new contractor performs any Work under this
9 Order.

10 5. Within thirty (30) days after Respondent selects an ap-
11 proved contractor, Respondent shall submit to EPA a routine Water
12 Quality and Water Level Monitoring Plan for subunit A and subunit
13 B/C groundwater, in accordance with EPA Region IX guidance
14 regarding sampling and analysis plans dated February 2, 1990.
15 Respondent shall use EPA methods 8010, 8020, and 8015 in accor-
16 dance with EPA manual Test Methods for Evaluating Solid Wastes,
17 Physical and Chemical Methods, SW-846, 3rd Edition. Respondent
18 shall submit all data results to EPA. This plan shall include,
19 but not be limited to, the following: (a) well construction in-
20 formation; (b) construction schedule and proposed locations for
21 new wells needed to monitor and confirm the extent of contamina-
22 tion is subunit A and subunit B/C groundwater; (c) proposed water
23 level and water quality sampling schedule; (d) a QA/QC Plan that
24 meets the requirements of Section XVII of this Order.

1 6. Upon approval of the Water Quality and Water Level
2 Monitoring Plan by EPA, Respondent shall implement the Water
3 Quality and Water Level Monitoring Plan according to the schedule
4 contained in such Plan. Any violation of the approved Water
5 Quality and Water Level Monitoring Plan shall be a violation of
6 this Order.

7 7. Unless otherwise directed by EPA, Respondent shall not
8 perform any Work under this Section prior to EPA's approval of
9 such Work.

10 A. Groundwater Remedy Remedial Design

11 1. Within forty five (45) days after Respondent selects an
12 approved contractor(s), Respondent shall submit a work plan for
13 the Groundwater Remedy Remedial Design at the Site ("Groundwater
14 Remedial Design Work Plan" or "Groundwater RD Work Plan") to EPA
15 for review and approval. The Groundwater RD Work Plan shall in-
16 clude a detailed plan for completing the remedial design for the
17 Groundwater Remedy described in this Order and in the ROD and for
18 attaining and maintaining all requirements, including Performance
19 Standards. The Groundwater Remedy consists of (1) a groundwater
20 extraction system(s) to create zones of capture which shall
21 hydraulically contain the hazardous substances listed in Table
22 2-5 of the ROD in the subunits A and B/C groundwater; (2) water
23 treatment system(s) to treat the extracted subunits A and B/C
24 groundwater; and (3) conveyance system(s) for the treated water

1 consistent with the requirements of the ROD. The Groundwater
2 Remedy may consist of separate and distinct extraction, treat-
3 ment, and conveyance systems for subunits A and B/C.

4 2. The Groundwater RD Work Plan must describe in detail
5 the tasks and deliverables Respondent will complete during the
6 remedial design phase, and a schedule for completing the tasks
7 and deliverables regarding the Groundwater Remedy consistent with
8 the timeframes set forth in this Order. The tasks and
9 deliverables in the Groundwater RD Work Plan shall include, but
10 not be limited to, the following: (1) a design memorandum; (2) a
11 description of the components required for the conceptual and
12 final designs; (3) a Field Investigation and Design Activities
13 Plan; (4) an Emergency Contingency Plan; (5) a Construction
14 Quality Assurance Plan (CQAP); and (6) a QA/AC Plan that meets
15 the requirements of Section XVII of this Order. The design
16 memorandum shall present the basic methodology, design criteria
17 and parameters, and critical issues regarding implementation of
18 the Groundwater Remedy. The Groundwater RD Work Plan shall be
19 consistent with EPA's "Superfund Remedial Design and Remedial Ac-
20 tion Guidance, OSWER Directive 9355.0-4A".

21 3. Respondent shall, within sixty (60) days after Respon-
22 dent selects an approved contractor, prepare and submit to EPA
23 for review, a Site Health and Safety Plan for field design ac-
24 tivities. The Site Health and Safety Plan shall conform to the
25 applicable Occupational Safety and Health Administration and EPA
26 requirements, including but not limited to 54 Fed. Reg. 9294.

1 4. Upon approval of the Groundwater RD Work Plan by EPA,
2 Respondent shall implement the Groundwater RD Work Plan according
3 to the schedule in this Order. Any violation of the approved
4 Groundwater RD Workplan shall be a violation of this Order. Un-
5 less otherwise directed by EPA, Respondent shall not perform fur-
6 ther groundwater Work at the Site prior to EPA's written approval
7 of the Groundwater RD Work Plan.

8 5. Within one-hundred fifty (150) days after EPA approves
9 the Groundwater RD Work Plan, Respondent shall submit a Concep-
10 tual Design for the Groundwater Remedy to EPA for review and ap-
11 proval. As used here, the term Conceptual Design means 30% of
12 complete final design. The Conceptual Design submittal shall in-
13 clude, at a minimum, the following:

14 a. Design analysis, including analysis necessary to satisfy
15 zone of capture requirements and substantive state and local per-
16 mitting requirements;

17 b. Location of extraction wells, the treatment plant, and
18 the end-use conveyance system;

19 c. Major equipment list;

20 d. Approximate pumping rates for all wells;

21 e. Site plan (piping/layout);

22 f. Copies of any necessary easements;

23 g. Piping and flow diagrams for treatment plant;

24 h. Ancillary equipment (substations, etc.);

25 i. Status of required State and local permit applications
26 if any.

1 6. Within ninety (90) days after EPA approval of the Conceptual
2 Design, Respondent shall submit a Final Design and specifications
3 for the Groundwater Remedy to EPA. The Final Design and
4 specifications submittal shall include, at a minimum, the follow-
5 ing:

6 a. Design analysis;

7 b. Piping and instrument diagram for the treatment plant;

8 c. Specification for the treatment plant and extraction
9 system sufficient to comply with the treatment plant discharge
10 requirements and zone of capture requirements described above;

11 d. Preliminary Groundwater Remedy Operation and Maintenance
12 Plan that includes, at a minimum:

13 i. Recommended frequency of water-level measurements
14 and water-quality testing for each extraction and monitoring
15 well, and water quality testing of the influent and treated ef-
16 fluent water at the point of discharge from the treatment plant.
17 These shall include separate schedules for startup and routine
18 operations;

19 ii. Proposed decision making process and criteria for
20 shutting down specific extraction wells;

21 iii. Recommended frequency for testing of air emis-
22 sions during startup and routine operations;

23 iv. Recommended frequency for water quality testing
24 during potential rebound period, and criteria for restarting an
25 extraction well in any particular area.

26 e. Construction schedule and phasing;

1 f. The Construction Quality Assurance Plan (CQAP) which
2 shall describe the approach to quality assurance during construc-
3 tion activities at the Site and shall specify a quality assurance
4 official (QA Official), independent of the supervising contrac-
5 tor, to conduct a quality assurance program during the construc-
6 tion phase of the project;

7 g. QA/QC Plan that meets the requirements of Section XVII
8 of this Order;

9 h. Required State and local permits if any;

10 i. Site Health and Safety Plan for the Groundwater Remedy.
11

12 B. Groundwater Remedy Remedial Action

13 1. Respondent shall treat all water from the groundwater
14 extraction system so that the effluent water meets the federal
15 and state standards for treatment plant discharge levels as iden-
16 tified in Table 2-5 of the ROD. During start-up activities,
17 Respondent shall check extracted water to and from the treatment
18 plant on a schedule as provided for in the Preliminary
19 Groundwater Remedial Action Operations and Maintenance Plan
20 developed in accordance with Paragraph A.6.d. of this Section.

21 2. Within forty-five (45) days after EPA approves all
22 deliverables required as part of the Final Design, Respondent
23 shall begin construction of the facilities for the implementation
24 of the Groundwater Remedy.

25 3. Respondent shall not commence Groundwater Remedy
26 remedial action at the Site without EPA approval to proceed.
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1 4. Within one-hundred eighty (180) days after the start of
2 construction of the Groundwater Remedy, Respondent shall commence
3 start-up for that remedy.

4 5. Respondent shall confirm the vertical and lateral
5 boundaries of the "zones of capture" for both subunits A and B/C
6 groundwater by groundwater monitoring. The zones of capture must
7 encompass the area(s) of the Site in which groundwater monitoring
8 indicates hazardous substance levels in excess of Performance
9 Standards. The Respondent shall maintain the zones of capture by
10 ensuring a hydraulic gradient from the edges of the areas exceed-
11 ing Performance Standards to the extraction wells.

12 6. Within sixty (60) days after the start-up of the
13 Groundwater Remedy, Respondent shall submit a final Operation and
14 Maintenance Plan for the Groundwater Remedy. Within five (5)
15 days of EPA's approval of the Final Operation and Maintenance
16 Plan for the Groundwater Remedy, Respondent shall begin and
17 thereafter maintain routine operation activities in accordance
18 with that plan.

19 7. The treatment plant discharge must meet the Performance
20 Standards based on the sampling schedule to be contained in the
21 Operation and Maintenance Plan. Respondent shall orally report
22 any noncompliance with Performance Standards, any treatment plant
23 shut-down exceeding forty-eight (48) hours, or any spills or
24 release of hazardous substances to EPA (and the City of Goodyear
25 if appropriate) within twenty-four (24) hours of discovery.
26 Respondent shall follow oral notification with a written
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1 submission to EPA (and the City of Goodyear if appropriate)
2 within five (5) days of Respondent's discovery of the noncom-
3 pliance. This submission shall include a description of the non-
4 compliance and its cause; identification of the period of noncom-
5 pliance, including the dates and times. If the noncompliance has
6 not been corrected, the submission must also estimate the an-
7 ticipated time it is expected to continue, and include a descrip-
8 tion of the steps taken or planned to eliminate and prevent
9 recurrence of the noncompliance.

10 8. Respondents shall continue operation and maintenance of
11 the Groundwater Remedy until water quality data from all extrac-
12 tion and monitoring wells listed in the final Operation and Main-
13 tenance Plan show compliance with the Performance Standards for
14 twenty-four (24) consecutive months and the requirements of this
15 Order are met.

16 C. SVE Remedial Design

17 1. Within forty-five (45) days after Respondent selects an
18 approved contractor, Respondent shall submit a work plan for the
19 Soil Vapor Extraction Remedial Design at the Site ("SVE Remedial
20 Design Work Plan" or "SVE RD Work Plan") to EPA for review and
21 approval. The SVE RD Work Plan shall include a detailed plan for
22 completing the remedial design for the soil vapor remedy
23 described in this Order and the ROD and for attaining and main-
24 taining all requirements, including Performance Standards.

2. The SVE RD Work Plan must describe in detail the tasks and deliverables Respondent will complete during the remedial design phase, and a schedule for completing the tasks and deliverables in the SVE RD Work Plan consistent with the timeframes set forth in this Order. The major tasks and deliverables in the SVE RD Work Plan shall include, but not be limited to, the following: (1) a design memorandum; (2) a description of the components of the conceptual and final design and specifications; (3) an Emergency Contingency Plan; (4) a Construction Quality Assurance Plan (CQAP); and (4) a QA/QC Plan that meets the requirements of Section XVII of this Order. The design memorandum shall present the basic methodology, design criteria and parameters, and critical issues regarding implementation of the SVE. The SVE RD Work Plan shall be consistent with EPA's "Superfund Remedial Design and Remedial Action Guidance, OSWER Directive 9355.0-4A".

3. Respondent shall, within forty-five (45) days after Respondent selects an approved contractor, prepare and submit to EPA for review, a Site Health and Safety Plan for field design activities. The Site Health and Safety Plan shall conform to the applicable Occupational Safety and Health Administration and EPA requirements, including but not limited to 54 Fed. Reg. 9294.

4. Upon approval of the SVE RD Work Plan by EPA, Respondent shall implement the SVE RD Work Plan according to the schedule in this Order. Any violation of the approved SVE RD

1 Workplan shall be a violation of this Order. Unless otherwise
2 directed by EPA, Respondent shall not perform further SVE Work at
3 the Site prior to EPA's written approval of the SVE RD Work Plan.

4 5. Within sixty (60) days after EPA approves the SVE RD
5 Work Plan, Respondent shall submit a Conceptual Design for the
6 SVE Work to EPA for review and approval. For the purposes of the
7 Order, the term Conceptual Design means 30% of complete final
8 design. The Conceptual Design submittal shall include, at a min-
9 imum, the following:

10 a. Design analysis, including analysis necessary to satisfy
11 substantive state and local permitting requirements if any;

12 b. Location of SVE treatment unit(s) and wells;

13 c. Major and ancillary equipment list;

14 d. Piping and flow diagrams;

15 e. Copies of any necessary easements;

16 f. Contingency plan.

17 6. Within sixty (60) days after EPA approves the Concep-
18 tual Design for the SVE Unit(s), Respondent shall submit a Final
19 Design and specifications for the SVE Unit(s) to EPA. The Final
20 Design and specifications submittal shall include, at a minimum,
21 the following:

22 a. Design analysis;

23 b. Piping and instrument diagram;

24 c. Specification for the SVE system design;

25 d. Construction schedule and phasing;

1 e. QA/QC Plan that meets the requirements of Section XVII
2 of this Order;

3 f. Construction schedule and phasing;

4 g. Preliminary SVE Remedial Action Operation and Main-
5 tenance Plan that includes, at a minimum:

6 i. Recommended frequency and methodology of measuring
7 pressures, flow rate, VOC concentrations at the wellhead and
8 emitted to the atmosphere, and other parameters necessary to
9 monitor and operate the systems performance. These shall include
10 separate schedules for startup and routine operations;

11 ii. Proposed decision making process and criteria for
12 shutting down specific soil vapor extraction wells, based on the
13 flowchart included in Attachment 2;

14 iii. Recommended frequency for testing of air emis-
15 sions during startup and routine operations;

16 iv. Recommended frequency for measurement of soil
17 vapor during system rebound, and criteria for restarting soil
18 vapor extraction in any particular area.

19 h. Construction Quality Assurance Plan (CQAP) which
20 describes the approach to quality assurance during construction
21 activities at the Site and specifies a quality assurance official
22 (QA Official), independent of the construction contractor, to
23 conduct a quality assurance program during the construction phase
24 of the project;

25 i. Required State and local permits if any;

26 j. Site Health and Safety Plan for the Soil Remedy.

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1 D. SVE Remedy Remedial Action

2 1. Within forty-five (45) days after EPA approves all
3 deliverables required as part of the Final Design, Respondent
4 shall begin construction of the facilities for the implementation
5 of the SVE remedy. Respondent shall not commence SVE remedial
6 action at the Site prior to EPA's approval of the SVE Final
7 Design.

8 2. Within ninety (90) days after the start of construction
9 of the SVE remedy, Respondent shall commence start-up for that
10 remedy.

11 3. Within sixty (60) days after the start-up of the SVE
12 remedy, Respondent shall submit a final Operation and Maintenance
13 Plan for the SVE Remedy. Within five (5) days after EPA's ap-
14 proval of the Final Operation and Maintenance Plan, Respondent
15 shall begin and thereafter maintain routine operation activities
16 in accordance with that plan.

17 4. Respondent shall continue operation of the SVE Remedy
18 until EPA determines that the requirements of the SVE Operation
19 Flow Chart (Attachment 2) have been satisfied and the require-
20 ments of this Order are met.

21 E. General Requirements For the Work

22 1. The Respondent shall operate and maintain on-line
23 (without any bypass) air emission controls at all times during
24 operation of any SVE Remedy and during operation of the
25 Groundwater Remedy. Respondent shall receive EPA approval prior
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1 to any removal of, or modification to, any air emissions controls
2 regarding the Work. The Respondent shall meet, at a minimum, the
3 following requirements:

4 (a) Any current (and future revisions to) Maricopa County
5 requirements;

6 (b) Any current (and future revisions to) provisions of the
7 Arizona State Implementation Plan under the Clean Air Act; and,

8 (c) Any current (and future revisions to) EPA policy for VOC
9 emissions from remedial action facilities at Superfund sites.

10 2. The Work performed by Respondent pursuant to this Order
11 shall, at a minimum, achieve Performance Standards.

12 3. Notwithstanding any action by EPA, Respondent remains
13 fully responsible for achieving the Performance Standards. Noth-
14 ing in this Order, or in EPA's approval of Respondent's submis-
15 sions under this Order, shall be deemed to constitute a warranty
16 or representation of any kind by EPA that full performance of the
17 Work will achieve the Performance Standards. Respondent's com-
18 pliance with such approved documents does not preclude EPA from
19 seeking additional work to achieve the applicable Performance
20 Standards.

21 4. All materials removed from the Site shall be disposed of
22 or treated at a facility approved by EPA in accordance with Sec-
23 tion 121(d)(3) of CERCLA, 42 U.S.C. Section 9621(d)(3); with the
24 U.S. EPA "Revised Off-Site Policy," OSWER Directive 9834.11,
25 November 13, 1987; and with all other applicable Federal, state,
26 and local requirements.

1 5. Respondent shall, prior to any off-site shipment of
2 hazardous substances from the Site to an out-of-state waste
3 management facility, provide written notification of such ship-
4 ment of hazardous substances to the appropriate state environmen-
5 tal official in the receiving state and to EPA's RPM. However,
6 the notification of shipments shall not apply to any off-Site
7 shipments when the total volume of all shipments from the Site to
8 the State will not exceed ten (10) cubic yards.

9 6. The notification of any off-site shipments shall be in
10 writing, and shall include the following information, where
11 available: (1) the name and location of the facility to which the
12 hazardous substances are to be shipped; (2) the type and quantity
13 of the hazardous substances to be shipped; (3) the expected
14 schedule for the shipment of the hazardous substances; and (4)
15 the method of transportation. Respondent shall notify the
16 receiving state of major changes in the shipment plan, such as a
17 decision to ship the hazardous substances to another facility
18 within the same state, or to a facility in another state.

19 7. The identity of the receiving facility and state shall
20 be determined by Respondent following the award of the contract
21 for Remedial Action construction. Respondent shall provide all
22 relevant information on the off-Site shipments as soon as prac-
23 ticable after the award of the contract and before the hazardous
24 substances are actually shipped.

1 8. Within thirty (30) days after Respondent concludes that
2 the Work required by this Order has been fully performed, Respon-
3 dent shall so notify EPA and schedule and conduct an inspection
4 to be attended by Respondent and EPA. The inspection shall be
5 followed by a written report submitted by Respondent within
6 thirty (30) days of the inspection by a registered professional
7 engineer and Respondent's Project Coordinator certifying that the
8 Work has been completed in full satisfaction of the requirements
9 of this Order. If, after completion of the inspection and
10 receipt and review of the written report, EPA determines that the
11 Work or any portion thereof has not been completed in accordance
12 with this Order, EPA shall notify Respondent in writing of the
13 activities that must be undertaken to complete the Work and shall
14 set forth in the notice a schedule for performance of such ac-
15 tivities. Respondent shall perform all activities described in
16 the notice in accordance with the specifications and schedules
17 established therein. Nothing in this Section shall limit EPA's
18 right to perform periodic reviews pursuant to Section 121(c) of
19 CERCLA, 42 U.S.C. Section 9621(c), or to take or require any ac-
20 tion that in the judgment of EPA is appropriate at the Site, in
21 accordance with 42 U.S.C. Sections 9604, 9606, or 9607.

22 XI. FAILURE TO ATTAIN PERFORMANCE STANDARDS

23 1. In the event that EPA determines that additional
24 response activities are necessary to meet applicable Performance
25 Standards, EPA may notify Respondent that additional response ac-
26 tions are necessary.

1 2. Unless otherwise stated by EPA, within thirty (30) days
2 of receipt of notice from EPA that additional response activities
3 are necessary to meet any applicable Performance Standards,
4 Respondent shall submit for approval by EPA a work plan for the
5 additional response activities. The plan shall conform to the
6 applicable requirements of Sections X, XVII, and XVIII of this
7 Order. Upon EPA's approval of the plan pursuant to Section XV,
8 Respondent shall implement the plan for additional response ac-
9 tivities in accordance with the provisions and schedule contained
10 therein.

11 XII. EPA PERIODIC REVIEW

12 Under Section 121(c) of CERCLA, 42 U.S.C. Section 9621(c),
13 and any applicable regulations, EPA may review Site conditions to
14 assure that the Work performed pursuant to this Order adequately
15 protects human health and the environment. Until such time as
16 EPA certifies completion of the Work, Respondent shall conduct
17 the requisite response actions as determined necessary by EPA in
18 order to permit EPA to conduct the review under Section 121(c) of
19 CERCLA. As a result of any review performed under this Section,
20 Respondent may be required to perform additional Work or to
21 modify Work previously performed.

22 XIII. ADDITIONAL RESPONSE ACTIONS

23 1. EPA may determine that in addition to the Work iden-
24 tified in this Order and attachments to this Order, additional
25 response activities may be necessary to protect human health and
26 the environment. If EPA determines that additional response
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1 activities are necessary, EPA may require Respondent to submit a
2 work plan for additional response activities. EPA may also re-
3 quire Respondent to modify any plan, design, or other deliverable
4 required by this Order, including any approved modifications.

5 2. Not later than thirty (30) days after receiving EPA's
6 notice that additional response activities are required pursuant
7 to this Section, Respondent shall submit a work plan for the
8 response activities to EPA for review and approval. Upon ap-
9 proval by EPA, the work plan is incorporated into this Order as a
10 requirement of this Order and shall be an enforceable part of
11 this Order. Upon approval of the work plan by EPA, Respondent
12 shall implement the work plan according to the standards,
13 specifications, and schedule in the approved work plan. Respon-
14 dent shall notify EPA in writing of their intent to perform such
15 additional response activities within seven (7) days after
16 receipt of EPA's request for additional response activities.

17 XIV. ENDANGERMENT AND EMERGENCY RESPONSE

18 1. In the event of any action or occurrence during the
19 performance of the Work which causes or threatens to cause a
20 release of a hazardous substance or which may present an im-
21 mediate threat to public health or welfare or the environment,
22 Respondent shall immediately take appropriate action to prevent,
23 abate, or minimize the threat, and shall immediately notify EPA's
24 Remedial Project Manager (RPM) (See Section XIX). If the RPM is
25 not available Respondent shall notify the EPA Emergency Response
26 Unit, Region 9 at (415) 744-1914. Respondent shall take such ac-

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tion in consultation with EPA's RPM and in accordance with all applicable provisions of this Order, including but not limited to the Health and Safety Plan and the Contingency Plan required by Section X of this Order. In the event that Respondent fails to take appropriate response action as required by this Section, and EPA takes that action instead, Respondent shall be liable to EPA for all costs of the response action not inconsistent with the NCP.

2. Nothing in the preceding Paragraph shall be deemed to limit any authority of the United States to take, direct, or order all appropriate action to protect human health and the environment or to prevent, abate, or minimize an actual or threatened release of hazardous substances on, at, or from the Site.

XV. EPA REVIEW OF SUBMISSIONS

1. After review of any deliverable, plan, report or other item which is required to be submitted for review and approval pursuant to this Order, EPA may: (a) approve the submission; (b) approve the submission with modifications; (c) disapprove the submission and direct Respondent to re-submit the document after incorporating EPA's comments; or (d) disapprove the submission and assume responsibility for performing all or any part of the response action. As used in this Order, the terms "approval by EPA", "EPA approval", or a similar term means the action described in (a) or (b) of this Paragraph. EPA approval shall be in writing.

2. In the event of approval or approval with modifications by EPA, Respondent shall proceed to take any action required by the plan, report, or other item, as approved or modified by EPA.

3. Upon receipt of a notice of disapproval or a request for a modification, Respondent shall, within fourteen (14) days or such longer time as specified by EPA in its notice of disapproval or request for modification, correct the deficiencies and resubmit the plan, report, or other item for approval. Notwithstanding the notice of disapproval, or approval with modifications, Respondent shall proceed, at the direction of EPA, to take any action required by any non-deficient portion of the submission.

4. If any submission is not approved by EPA, Respondent shall be deemed to be in violation of this Order.

5. Notwithstanding any approvals which may be granted by the EPA, no warranty of any kind is provided by EPA with regard to the Work.

6. Any reports, plans, specifications, schedules, appendices, and attachments required or established by this Order are, upon approval by EPA, incorporated into this Order.

XVI. PROGRESS REPORTS

In addition to the other deliverables set forth in this Order, Respondent shall provide monthly progress reports to EPA with respect to actions and activities undertaken pursuant to this Order. The progress reports shall be submitted on or before the tenth day of each month following the effective date of this

Order. At a minimum these progress reports shall: (1) describe the actions which have been taken to comply with this Order during the prior month; (2) include all results of sampling and tests and all other data received by Respondent and not previously submitted to EPA; (3) describe all Work activities projected to be commenced or completed during the next reporting period with schedules relating such work to the overall project schedule for RD/RA completion; and (4) describe all problems encountered and any anticipated problems, any actual or anticipated delays, and solutions developed and implemented to address any actual or anticipated problems or delays.

XVII. QUALITY ASSURANCE, SAMPLING AND DATA ANALYSIS

1. Respondent shall use the quality assurance, quality control, and chain of custody procedures described in the "EPA NEIC Policies and Procedures Manual," May 1978, revised May 1986, EPA-330/9-78-001-R; the "National Enforcement Investigations Center Manual for the Evidence Audit", published in September 1981; EPA's "Guidelines and Specifications for Preparing Quality Assurance Program Documentation," June 1, 1987; EPA's "Data Quality Objective Guidance," (EPA/540/G87/003 and 004); and any amendments to these documents, while conducting all sample collection and analysis activities required herein by any plan. To provide quality assurance and maintain quality control, Respondent shall:

a. Use only laboratories which have a documented Quality Assurance Program that complies with EPA guidance document QAMS-005/80.

1 b. Ensure that the laboratory used by the Respondent for
2 analyses, performs according to a method or methods deemed satis-
3 factory to EPA and submits all protocols to be used for analyses
4 to EPA at least thirty (30) days before beginning analysis.

5 c. Ensure that EPA personnel and EPA's authorized represen-
6 tatives are allowed access to the laboratory and personnel used
7 by the Respondent for analyses.

8 2. Respondent shall notify EPA not less than fourteen (14)
9 days in advance of any sample collection activity. At the re-
10 quest of EPA, Respondent shall allow split or duplicate samples
11 to be taken by EPA or its authorized representatives, of any
12 samples collected by Respondent with regard to the Site or pur-
13 suant to the implementation of this Order. In addition, EPA
14 shall have the right to take any additional samples that EPA
15 deems necessary.

16 XVIII. COMPLIANCE WITH APPLICABLE LAWS

17 1. All activities by Respondent pursuant to this Order
18 shall be performed in accordance with the requirements of all ap-
19 plicable federal, state, and local laws, regulations, and permit-
20 ting requirements. EPA has determined that the response actions
21 required by this Order, if performed in accordance with this Or-
22 der, are consistent with the National Contingency Plan (NCP).

23 2. As provided in Section 121(e) of CERCLA and the NCP, no
24 permit shall be required for any portion of the Work conducted
25 entirely on-Site. Where any portion of the Work requires a
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1 federal or state permit or approval, Respondent shall submit
2 timely applications and take all other actions necessary to ob-
3 tain and to comply with all such permits or approvals.

4 3. This Order is not, and shall not be construed to be, a
5 permit issued pursuant to any federal or state statute or regula-
6 tion.

7 4. Nothing in this Order shall be deemed to constitute a
8 preauthorization of a CERCLA claim within the meaning of Sections
9 111 or 112 of CERCLA, 42 U.S.C. Section 9611 or 9612, or 40
10 C.F.R. Section 300.25(d).

11 XIX. REMEDIAL PROJECT MANAGER

12 1. All communications, whether written or oral, from Respon-
13 dent to EPA shall be directed to EPA's Remedial Project Manager
14 ("RPM") with a copy directed to EPA's Assistant Regional Counsel.
15 Respondent shall submit to EPA three copies of all documents, in-
16 cluding plans, reports, and other correspondence, which are
17 developed pursuant to this Order, and shall send these documents
18 by certified mail, return receipt requested. EPA's Remedial
19 Project Manager is:

20
21 Craig Cooper, 1235 Mission Street (H-7-2), San Francisco, CA
22 94103, phone number: (415) 744-1685.

23
24 EPA's Assistant Regional Counsel is:

25 Allyn L. Stern, Office of Regional Counsel, 1235 Mission St.
26 San Francisco, CA 94103, phone number (415) 556-5867.

2. EPA may change its Remedial Project Manager or Assistant Regional Counsel.

3. EPA's RPM shall have the authority lawfully vested in a Remedial Project Manager (RPM) and On-Scene Coordinator (OSC) by the National Contingency Plan, 40 C.F.R. Part 300. EPA's RPM shall have authority, consistent with the National Contingency Plan, to halt any work required by this Order, and to take any necessary response action.

4. Within ten (10) days after the effective date of this Order, Respondent shall designate a Project Coordinator to represent it regarding the Work addressed in this Order, and shall submit the name, address, and telephone number of the Project Coordinator to EPA for review and approval. Respondent's Project Coordinator shall be responsible for overseeing Respondent's implementation of this Order and for coordination of communication between EPA and Respondent. If Respondent wishes to change its Project Coordinator, Respondent shall provide written notice to EPA, five (5) days prior to changing the Project Coordinator, of the name and qualifications of the new Project Coordinator.

XX. ACCESS TO SITE NOT OWNED BY RESPONDENT

1. If the Site, any off-Site area that is to be used for access, property where documents required to be prepared or maintained by this Order are located, or other property subject to or affected by the clean up, is owned in whole or in part by parties other than those bound by this Order, Respondent shall obtain site access agreements from the present owner(s) within thirty

(30) days of the effective date of this Order. Such agreements shall provide access for EPA, its contractors and oversight officials, the state and its contractors, and Respondent or Respondent's authorized representatives and contractors, and such agreements shall specify that Respondent is not EPA's representative with respect to liability associated with Site activities. Copies of such agreements shall be provided to EPA prior to Respondent's initiation of field activities.

2. If access agreements are not obtained within the time referenced above, Respondent shall immediately notify EPA of their failure to obtain access. In its sole discretion, EPA may decide to perform those response actions with EPA contractors at the property in question or take other action with regard to access issues. If EPA decides to perform those tasks or activities, Respondent shall perform all other activities not requiring access to that property. Respondent shall integrate the results of any such tasks undertaken by EPA into its reports and deliverables.

XXI. SITE ACCESS AND DATA/DOCUMENT AVAILABILITY

1. Respondent shall allow EPA and its authorized representatives and contractors to enter and freely move about all property at the Site and off-Site areas subject to or affected by the Work under this Order or where documents required to be prepared or maintained by this Order are located as deemed necessary by EPA, including such access for the purposes of inspecting conditions, activities, the results of activities, records,

1 operating logs, and contracts related to the Site or Respondent
2 and its representatives or contractors pursuant to this Order;
3 reviewing the progress of the Respondent in carrying out the
4 terms of this Order; conducting tests as EPA or its authorized
5 representatives or contractors deem necessary; using a camera,
6 sound recording device or other documentary type equipment; and
7 verifying the data submitted to EPA by Respondent. Respondent
8 shall allow EPA and its authorized representatives to enter the
9 Site, to inspect and copy all records, files, photographs, docu-
10 ments, sampling and monitoring data, and other writings related
11 to work undertaken in carrying out this Order. Nothing herein
12 shall be interpreted as limiting or affecting EPA's right of
13 entry or inspection authority under Federal law.

14 2. Under the provisions of Section 104(e) of CERCLA, 42
15 U.S.C. Section, 9604(e), EPA explicitly reserves the right to ob-
16 serve the Work of Respondent as it is performed. In addition,
17 EPA and its authorized representatives reserve the right, at its
18 request, to take splits of any samples obtained by Respondent or
19 anyone acting on Respondent's behalf in the implementation of the
20 Work.

21 3. During the design, construction, and start-up ac-
22 tivities, Respondent shall notify EPA fourteen (14) days prior to
23 any sampling conducted by Respondent or anyone acting on
24 Respondent's behalf. Respondent shall notify EPA fourteen (14)
25 days prior to the disposal of any such sample, and EPA shall have
26 an opportunity to take possession of all or a portion of such
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1 sample. Respondent need not provide EPA with 14-day notice of
2 scheduled sampling relating to the routine operation of the
3 treatment system. Prior to commencement of the routine operation
4 of the treatment system, however, Respondent shall provide EPA
5 with a schedule for all routine sampling relating to the opera-
6 tion of the treatment system. Respondent shall notify EPA seven
7 (7) days in advance of any changes in the routine sampling
8 schedule. If changes in the routine treatment system sampling
9 are required as a result of unexpected conditions, Respondent
10 shall orally notify EPA within forty-eight (48) hours of such oc-
11 currence and shall provide EPA with the results of analysis of
12 such sampling when the results become available.

13 4. Respondent may assert a claim of business confiden-
14 tiality covering part or all of the information submitted to EPA
15 pursuant to the terms of this Order under 40 C.F.R. section 2.203
16 only if such claim is not inconsistent with Section 104(e)(7) of
17 CERCLA, 42 U.S.C. section 9604(e)(7), or other provisions of law.
18 Any such claim shall be asserted in the manner described by 40
19 C.F.R. section 2.203(b) and substantiated by Respondent at the
20 time the claim is made. Information determined by EPA to be con-
21 fidential will be given the protection specified in 40 C.F.R.
22 Part 2. If no such claim accompanies the information when it is
23 submitted to EPA, it may be made available to the public by EPA
24 or the state without further notice to the Respondent. Respon-
25 dent shall not assert confidentiality claims with respect to any
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1 sampling or analytical data or reports generated under this Order
2 or for documents that fall under Section 104(e)(7)(F) of CERCLA,
3 42 U.S.C. Section 9604(e)(7)(F).

4 5. Respondent shall maintain an index of documents that
5 Respondent claims contain confidential business information for
6 the period during which this Order is in effect. The index shall
7 contain, for each document, the date, author, addressee, and sub-
8 ject of the document. Upon written request from EPA, Respondent
9 shall submit a copy of the index to EPA.

10 XXII. RECORD PRESERVATION

11 1. Respondent shall provide to EPA upon request, copies of
12 any and all documents and information within its possession or
13 control or in possession or control of its divisions, employees,
14 agents, accountants, contractors, or attorneys (other than docu-
15 ments or information privileged under the attorney-client or work
16 product privileges) relating to activities at the Site or to the
17 implementation of this Order, including but not limited to sam-
18 pling, analysis, chain of custody records, manifests, trucking
19 logs, receipts, reports, sample traffic routing, correspondence,
20 or other documents or information related to the Work. Respon-
21 dent shall also make available to EPA for purposes of investiga-
22 tion, information gathering, or testimony, its employees, agents,
23 or representatives with knowledge of relevant facts concerning
24 the performance of the Work.

1 2. For a period of ten (10) years following Respondent's
2 completion of the Work pursuant to Section X.D.8. of this Order,
3 Respondent shall preserve and retain all records and documents in
4 its possession or control or in the possession or control of its
5 divisions, employees, agents, accountants, contractors or attor-
6 neys, that relate in any manner to the Work, environmental condi-
7 tions at the Site, the causes of the environmental conditions at
8 the Site, Respondent's liability for those environmental condi-
9 tions, Respondent's use or disposal of hazardous substances at
10 the Site, or the implementation of this Order. At the conclusion
11 of this document retention period, Respondent shall notify EPA at
12 least ninety (90) days prior to the destruction of any such
13 records or documents, and upon request by EPA, Respondent shall
14 deliver any such records or documents to EPA.

15 3. Until ten (10) years after Respondent's completion of
16 the Work pursuant to Section X.D.8. of this Order, Respondent
17 shall preserve, and shall instruct their contractors and agents
18 to preserve, all documents, records, and information of whatever
19 kind, nature or description relating to the performance of the
20 Work. Upon the conclusion of this document retention period,
21 Respondent shall notify EPA at least ninety (90) days prior to
22 the destruction of any such records, documents or information,
23 and, upon request of EPA, Respondent shall deliver all such docu-
24 ments, records and information to EPA.

4. Within thirty (30) days after the effective date of this Order, Respondent shall submit a written certification to EPA's RPM stating whether or not Respondent has altered, mutilated, discarded, disposed of, or destroyed, since notification of potential liability by the United States or the State, any records, documents or other information relating to: 1) its potential liability under CERCLA, 2) and its use of or disposal of hazardous substances with regard to the Site. Respondent shall not dispose of any such documents after the effective date of this Order without prior approval by EPA. Respondent shall, upon EPA's request and at no cost to EPA, deliver the documents or copies of the documents to EPA.

XXIII. DELAY IN PERFORMANCE

1. Any delay in performance of this Order that, in EPA's judgment, is not properly justified by Respondent under the terms of this Paragraph shall be considered a violation of this Order. Any delay in performance of this Order shall not affect Respondent's obligations to fully comply with all terms and conditions of this Order.

2. Respondent shall notify EPA of any delay or anticipated delay in performing any requirement of this Order. Such notification shall be made by telephone to EPA's RPM within twenty-four (24) hours after Respondent first knew or should have known that a delay might occur. Respondent shall adopt all reasonable measures to avoid or minimize any such delay. Within four (4) days after notifying EPA by telephone, Respondent shall

1 provide written notification fully describing the nature of the
2 delay, any asserted justification for delay, any reason why
3 Respondent should not be held strictly accountable for failing to
4 comply with any relevant requirements of this Order, the measures
5 planned and taken to minimize the delay, and a schedule for im-
6 plementing the measures that will be taken to mitigate the effect
7 of the delay. Increased costs or expenses associated with im-
8 plementation of the activities called for in this Order are not a
9 justification for any delay in performance.

10 XXIV. ASSURANCE OF ABILITY TO COMPLETE WORK

11 1. Respondent shall demonstrate its ability to complete
12 the Work required by this Order and to pay all claims that arise
13 from the performance of the Work by obtaining and presenting to
14 EPA within thirty (30) days after the effective date of this Or-
15 der, one of the following: (1) a performance bond; (2) a letter
16 of credit; (3) a guarantee by a third party; or (4) internal
17 financial information which is sufficient to allow EPA to deter-
18 mine that Respondent has sufficient assets available to perform
19 the Work. Respondent shall demonstrate financial assurance in an
20 amount no less than the estimate of cost for the remedial design
21 and remedial action contained in the Record of Decision for the
22 Site. If Respondent seeks to demonstrate ability to complete the
23 remedial action by means of internal financial information, or by
24 guarantee of a third party, it shall re-submit such information
25 annually, on the anniversary of the effective date of this Order.
26 If EPA determines that such financial information is inadequate,

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Respondent shall, within thirty (30) days after receipt of EPA's notice of determination, obtain and present to EPA for approval one of the other three forms of financial assurance listed above.

2. At least seven (7) days prior to commencing any work at the Site pursuant to this Order, Respondent shall submit to EPA a certification that Respondent or its contractors and subcontractors have adequate insurance coverage or have indemnification for liabilities for injuries or damages to persons or property which may result from the activities to be conducted by or on behalf of Respondent pursuant to this Order. Respondent shall ensure that such insurance or indemnification is maintained for the duration of the Work required by this Order.

XXV. UNITED STATES NOT LIABLE

The United States, by issuance of this Order, assumes no liability for any injuries or damages to persons or property resulting entirely or partially from acts or omissions by Respondent, or its directors, officers, employees, agents, representatives, successors, assigns, contractors, or consultants in carrying out any action or activity pursuant to this Order. Neither EPA nor the United States may be deemed to be a party to any contract entered into by Respondent or its directors, officers, employees, agents, successors, assigns, contractors, or consultants in carrying out any action or activity pursuant to this Order. Respondent, its directors, officers, employees, agents, successors, assigns, contractors, and consultants shall not be considered agents of the United States.

XXVI. ENFORCEMENT AND RESERVATIONS

1. EPA reserves the right to bring an action against Respondent under Section 107 of CERCLA, 42 U.S.C. Section 9607, for recovery of any response costs incurred by the United States related to this Order and not reimbursed by Respondent. This reservation shall include but not be limited to past costs, direct costs, indirect costs, the costs of any response actions EPA takes under this Order, the costs of oversight, the costs of compiling the cost documentation to support oversight cost demand, as well as accrued interest as provided in Section 107(a) of CERCLA. In addition, EPA reserves the right to bring an action against Respondent for civil penalties under Section 106(b) of CERCLA, 42 U.S.C. Section 9606(b), and for treble damages under Section 107(c)(3) of CERCLA, 42 U.S.C. Section 9607(c)(3).

2. Notwithstanding any other provision of this Order, at any time during the response action, EPA may perform its own studies, complete the response action (or any portion of the response action) as provided in CERCLA and the NCP, and seek reimbursement from Respondent for its costs, or seek any other appropriate relief.

3. Nothing in this Order shall preclude EPA from taking any additional enforcement actions, including modification of this Order or issuance of additional Orders, and/or additional remedial or removal actions as EPA may deem necessary, or from requiring Respondent in the future to perform additional activities pursuant to CERCLA, 42 U.S.C. section 9606(a), et seq.

1 or any other applicable law. Respondent shall be liable as
2 provided in CERCLA Section 107(a), 42 U.S.C. Section 9607(a), for
3 the costs of any such additional actions.

4 4. Notwithstanding any provision of this Order, the United
5 States retains all of its information gathering, inspection and
6 enforcement authorities and rights under CERCLA, RCRA and any
7 other applicable statutes or regulations.

8 XXVII. CIVIL PENALTIES

9 1. Respondent shall be subject to civil penalties under
10 Section 106(b) of CERCLA, 42 U.S.C. Section 9606(b), of not more
11 than \$25,000 for each day in which Respondent willfully violates,
12 or fails or refuses to comply with this Order without sufficient
13 cause. In addition, failure to properly provide response action
14 under this Order, or any portion hereof, without sufficient
15 cause, may result in liability under Section 107(c)(3) of CERCLA,
16 42 U.S.C. Section 9607(c)(3), for punitive damages in an amount
17 at least equal to, and not more than three times, the amount of
18 any costs incurred by the Fund as a result of such failure to
19 take proper action.

20 2. Nothing in this Order shall constitute or be construed
21 as a release from any claim, cause of action or demand in law or
22 equity against any person for any liability it may have arising
23 out of or relating in any way to the Site.

1 3. If a court issues an order that invalidates any provi-
2 sion of this Order or finds that Respondent has sufficient cause
3 not to comply with one or more provisions of this Order, Respon-
4 dent shall remain bound to comply with all provisions of this Or-
5 der not invalidated by the court's order.

6 XXVIII. ADMINISTRATIVE RECORD

7 Upon request by EPA, Respondent must submit to EPA all
8 documents related to the selection of the response action for
9 possible inclusion in the administrative record file.

10 XXIX. EFFECTIVE DATE AND COMPUTATION OF TIME

11 This Order shall be effective on October 10, 1990.

12 XXX. SECTION HEADINGS

13 The section headings set forth in this Order and its Table
14 of Contents are included for convenience of reference only and
15 shall be disregarded in the construction and interpretation of
16 any of the provisions of this Order.

17
18 So Ordered, this 10th day of October, 1990.

19
20 BY: 

21 Jeffrey Zelickson
22 Director, Hazardous Waste Management Division
23 U.S. Environmental Protection Agency
24 Region 9
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